

Amendments to Specification

Please amend page 5, paragraph 3 as follows:

Since In and Sb have high atomic numbers of 49 and 51, respectively, using the compound semiconductor InSb is advantageous for the purpose of absorbing x-rays and gamma-rays and contributes to the fabrication of a smaller-scale solid-state radiation detector. If the probability of interaction with photons is expressed by  $(\text{atomic number})^5 \times (\text{density})$ , the value for InSb is about 1400 times as high as the value of Si and about 10 times higher than the value for Ge. It follows that a Ge detector with a volume of 100 cc has an equivalent detection efficiency to an InSb detector with a volume of 10 cc.

Please amend page 9, paragraph 1 as follows:

In Example 2, a high-purity InSb single-crystal wafer measuring 5 mm x 8 mm in a thickness of 0.5 mm (manufactured by Sumitomo Electric Industries, Ltd.) was used as the InSb single crystal. The surface of the high-purity InSb single-crystal wafer was etched with a 1:10 liquid mixture of nitric acid and lactic acid and a Sn layer was then deposited. The SnAl ~~Sn~~ layer was subsequently etched to form a mesa electrode of 3 mm $\phi$ . In order to form a resistive electrode on the other side of the wafer, it was fixed by In soldering to a Cu substrate.

Please amend page 10, paragraph 1 as follows:

In Example 3, a p-type InSb single-crystal wafer measuring 5 mm x 8 mm in a thickness of 0.5 mm doped with  $3.5 \times 10^{15} \text{ cm}^{-3}$  of Ge (manufactured by Wafer Technology Ltd.) was used as the InSb single crystal. The surface of the p-type InSb single-crystal wafer was etched with a 1:10 liquid mixture of nitric acid and lactic acid and a Sn layer was then deposited. The SnAl

~~Sn~~ layer was subsequently etched to form a mesa electrode of 3 mmφ. In order to form a resistive electrode on the other side of the wafer, it was fixed by In soldering to a Cu substrate.